Amendments to the Specification:

On page 3, please amend the paragraph spanning lines 7-17 as follows:

A small step is made in the direction of solving the above problems in M. Wu, B. Liu, "Watermarking For Image Authentication", Proc. ICIP '98, Chicago, Oct 1998, wherein each signature bit is embedded in a digital image in two spatially separate locations by 'backup embedding'. The backup embedding location is identified deterministically and has a fixed spatial relation to the original embedding location. Thus, when both chosen embedding locations contain flat content, the block's signature bits cannot be extracted when validating the authenticity of the digital image. Furthermore, in case that a region of the image containing the backup block for a smooth area is tampered, the smooth area can no longer be authenticated, thus tampering of one [[are]] area of an image prevents authentication of a completely different area. The problems caused by flat content as outlined above are therefore not solved by the cited disclosure.

On page 3, please amend the paragraph spanning lines 22-31 as follows:

The present invention overcomes the above-identified deficiencies in the art and solves the above problems by providing watermark embedding by which each signature bit is spread over the whole image, or at least over a large area of it[[,]] ~~according to the appended independent claims~~. The signature derives bits from all image regions, including areas with flat or otherwise un-watermarkable content, thus enabling authentication of all image regions. The embedding of the watermark is done so as to achieve the best trade-off between payload size, robustness, and visibility. The technical effect thus achieved is that signature bits of all image areas can be extracted, even if the original content is flat or has been replaced by tampering. Moreover, the embedding method becomes independent of the signature generation.

On page 6, after the final paragraph ending on line 22, please insert the following new paragraph:

The present invention has been described with reference to the preferred embodiments. Modifications and alterations may occur to others upon reading and understanding the preceding detailed description. It is intended that the present application be construed as including all such modifications and alterations insofar as they come within the scope of the appended claims or the equivalents thereof.